

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

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1. (Currently Amended) A camera control system comprising:
first image pickup ~~means for picking~~ device which picks up an image of an object through a wide-angle lens having distortion, to output a moving image;
image processing ~~means for performing~~ device which performs projective transformation processing to correct distortion of the moving image outputted from said first image pickup ~~means~~ device;
second image pickup ~~means~~ device having no distortion, ~~for outputting~~ which outputs a moving image;
display ~~means for displaying~~ device which displays the moving image processed by said image processing ~~means~~ device, and ~~for superimposing and displaying~~ which superimposes and displays, on the displayed moving image, a rectangular frame indicative of an image-pickup area of said second image pickup ~~means~~ device;
designating ~~means for designating~~ device which designates a desired rectangular area within the moving image displayed by said display ~~means~~ device; and
control ~~means for controlling~~ device which controls at least one of panning, tilting and zooming of said second image pickup ~~means~~ device in such a way as to pick up an image corresponding to the rectangular area designated by said designating ~~means~~ device.
2. (Currently Amended) A camera control system according to claim 1, wherein said display ~~means~~ device displays, on a common screen, the moving image processed by said

image processing ~~means~~ device and the moving image outputted from said second image pickup ~~means~~ device.

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3. (Currently Amended) A camera control system according to claim 1, wherein a position and a size of the rectangular frame displayed by said display ~~means~~ device are determined on the basis of a parameter outputted from said second image pickup ~~means~~ device.

4. (Currently Amended) A camera control system according to claim 1, further comprising:

frame rate control ~~means for making~~ device which makes a frame rate of the moving image outputted from said second image pickup ~~means~~ device higher than a frame rate of the moving image processed by said image processing ~~means~~ device, before the moving images are outputted to said display ~~means~~ device.

5. (Currently Amended) A camera control system according to claim 1, wherein said first image pickup ~~means~~ device includes a plurality of image pickup ~~means~~ devices, and said image processing ~~means~~ device processes and combines moving images outputted from said plurality of image pickup ~~means~~ devices into one moving image.

6. (Currently Amended) A camera control system according to claim 1, further comprising:

an optical member for making object light incident thereon; and

an optical splitting member for splitting the object light coming through said optical member into two light beams and for making the two split light beams incident on said first image pickup ~~means~~ device and said second image pickup ~~means~~ device, respectively, so that image-pickup optical axes of said first image pickup ~~means~~ device and said second image

pickup means device coincide with each other.

7. (Currently Amended) A camera control system according to claim 1, wherein said image processing means device executes an affine transformation on the basis of information on an image-pickup direction of said first image pickup means device.

8. (Currently Amended) A camera control system according to claim 1, wherein said wide-angle lens having distortion for use with said first image pickup means device is a fisheye lens.

9. (Original) A camera control system comprising:
a convex mirror for reflecting object light incident thereon; and
image pickup means for picking up the object light reflected from said convex mirror, to output a moving image,

wherein said convex mirror is constructed such that a surface thereof has a fovea-centralis-like configuration in which a central portion of the surface is formed as a low-curvature surface and a peripheral portion of the surface is formed as a high-curvature surface.

10. (Original) A camera control system according to claim 9, wherein said convex mirror has a curved surface made by, when a center axis of said convex mirror is taken as Y axis, rotating a curve expressed by $Y = aX^4$ (a : constant) around the Y axis.

11. (Original) A camera control system according to claim 9, further comprising:
image processing means for removing distortion of a peripheral portion of the moving image outputted from said image pickup means; and
display means for displaying the moving image processed by said image processing means.

12. (Original) A camera control method comprising the steps of:

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picking up an image of an object by using first image pickup means through a wide-angle lens having distortion, to output a moving image;

performing projective transformation processing to correct distortion of the moving image outputted from said first image means;

outputting a moving image by using second image pickup means having no distortion;

displaying the processed moving image, and superimposing and displaying, on the displayed moving image, a rectangular frame indicative of an image-pickup area of said second image pickup means;

designating a desired rectangular area within the displayed moving image; and

controlling at least one of panning, tilting and zooming of said second image pickup means in such a way as to pick up an image corresponding to the designated rectangular area.

13. (Original) A camera control method according to claim 12, wherein the processed moving image and the moving image outputted from said second image pickup means are displayed on a common screen.

14. (Original) A camera control method according to claim 12, wherein a position and a size of the displayed rectangular frame are determined on the basis of a parameter outputted from said second image pickup means.

15. (Original) A camera control method according to claim 12, further comprising the step of:

making a frame rate of the moving image outputted from said second image pickup means higher than a frame rate of the processed moving image, before the moving images are outputted to be displayed.

16. (Original) A camera control method according to claim 12, wherein said first

image pickup means includes a plurality of image pickup means, and moving images outputted from said plurality of image pickup means are processed and combined into one moving image.

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17. (Original) A camera control method according to claim 12, further comprising the step of:

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making object light incident on an optical member; and
splitting the object light coming through said optical member into two light beams and making the two split light beams incident on said first image pickup means and said second image pickup means, respectively, so that image-pickup optical axes of said first image pickup means and said second image pickup means coincide with each other.

18. (Original) A camera control method according to claim 12, wherein said projective transformation processing includes an affine transformation which is executed on the basis of information on an image-pickup direction of said first image pickup means.

19. (Original) A camera control method according to claim 12, wherein said wide-angle lens having distortion for use with said first image pickup means is a fisheye lens.

20. (Original) A storage medium which stores therein a program for executing a process of controlling a camera control system, said process comprising:

picking up an image of an object by using first image pickup means through a wide-angle lens having distortion, to output a moving image;

performing projective transformation processing to correct distortion of the moving image outputted from said first image pickup means;

outputting a moving image by using second image pickup means having no distortion;

displaying the processed moving image, and superimposing and displaying, on the

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displayed moving image, a rectangular frame indicative of an image-pickup area of said second image pickup means;

designating a desired rectangular area within the displayed moving image; and
controlling at least one of panning, tilting and zooming of said second image pickup

means in such a way as to pick up an image corresponding to the designated rectangular area.